

5' AG TCG CAG GTG TGC TGC TGA GGC GTG AGA ATG GCG TCC CGC GGC CGG CGT CCG 54  
 9 18 27 36 45  
 M A S R G R P

63 72 81 90 99 108  
 GAG CAT GGC GGA CCC CCA GAG CTG TTT TAT GAC GAG ACA GAA GCC CGG AAA TAC  
 E H G G P P E L F Y D E T E A R K Y

117 126 135 144 153 162  
 GTT CGC AAC TCA CGG ATG ATT GAT ATC CAG ACC AGG ATG GCT GGC CGA GCA TTG  
 V R N S R M I D I Q T R M A G R A L

171 180 189 198 207 216  
 GAG CTT CTT TAT CTG CCA GAG AAT AAG CCC TGT TAC CTG CTG GAT ATT GGC TGT  
 E L L Y L P E N K P C Y L L D I G C

225 234 243 252 261 270  
 GGC ACT GGC CTG AGT GGA AGT TAT CTG TCA GAT GAA GGC CAC TAT TGG GTG GGC  
 G T G L S G S Y L S D E G H Y W V G

279 288 297 306 315 324  
 CTG GAT ATC AGC CCT GCC ATG CTG GAT GAG GCT GTG GAC CGA GAG ATA GAG GGA  
 L D I S P A M L D E A V D R E I E G

333 342 351 360 369 378  
 GAC CTG CTG GGC GAT ATG GGC CAG GGC ATC CCA TTC AAG CCA GGC ACA TTT  
 D L L L G D M G G Q G I P F K P G T F

FIGURE 1A

387	GAT GGT TGC ATC AGC ATT TCT GCT GTG CAG TGG CTC TGT AAT GCT AAC AAG AAG	396	405	414	423	432
	D G C I S I S A V Q W L C N A N K K					
441	TCT GAA AAC CCT GCC AAG CGC CTG TAC TGC TTT TTT GCT TCT CTT TTT TCT GTT	450	459	468	477	486
	S E N P A K K R L Y C F F A S L F S V					
495	CTC GTC CGG GGA TCC CGA GCT GTC CTG CAG CTG TAC CCT GAG AAC TCA GAG CAG	504	513	522	531	540
	L V R G S R A V L Q L Y P E N S E Q					
549	TTG GAG CTG ATC ACA ACC CAG GCC ACA AAG GCA GGC TTC TCC GGT GGC ATG GTG	558	567	576	585	594
	L E L I T T Q A T K A G F S G M V					
603	GTA GAC TAC CCT AAC AGT GCC AAA GCA AAG AAA TTC TAC CTC TGC TTG TTT TCT	612	621	630	639	648
	V D Y P N S A K A K K F Y L C L F S					
657	GGG CCT TCG ACC TTT ATA CCA GAG GGG CTG AGT GAA AAT CAG GAT GAA GTT GAA	666	675	684	693	702
	G P S T F I P E G L S E N Q D E V E					
711	CCC AGG GAG TCT GTG TTC ACC AAT GAG AGG TTC CCA TTA AGG ATG TCG AGG CGG	720	729	738	747	756
	P R E S V F T N E R F P L R M S R R					

FIGURE 1B

765	GGA ATG GTG AGG AAG AGT CGG GCA TGG GTG CTG GAG AAG AAG GAG CGG CAC AGG	774	783	792	801	810
G M V	R K S	A R A	W V L	E K K	E R H	R
819	CGC CAG GGC AGG GAA GTC AGA CCT GAC ACC CAG TAC ACC GGC CGC AAG CGC AAG	828	837	846	855	864
R Q G	R E V	R P D	T Q Y	T G R	K R K	K
873	CCC CGC TTC TAA GTC ACC ACG CGG TTC TGG AAA GGC ACT TGC CTC TGC ACT TTT	882	891	900	909	918
P R F						
927	CTA TAT TGT TCA GCT GAC AAA GTA GTA TTT TAG AAA AGT TCT AAA GTT ATA AAA	936	945	954	963	972
981	ATG TTT TCT GCA GTA AAA AAA AAG TTC TCT GGG CCG GGC GTG GTG GCT CAC ACC	990	999	1008	1017	1026
1035	TGT AAT CCC AGC ACC TTG GGA GGC TGA GGT GGA AGG ATC ATT TGA GGC CAG GAG	1044	1053	1062	1071	1080
1089	TTT GAG ACC TGC CTG GGC AAC ATA ATG AAA CTT CCT TTC CAG GGA GAA AAA AAA	1098	1107	1116	1125	1134

AA 3'

FIGURE 1C

1 M A S R G R R P E H G G P P E L F Y D E 10625  
 1 M A S F K V K P E H T G P P D L Y Y N E GI 1065505  
 1 M S - - - - R P E E L A P P E I F Y N D GI 1907189

21 T E A R K Y V R N S R M I D I Q T R M A 10625  
 21 T E A A K Y A S N S H I T A I Q H E M A GI 1065505  
 17 S E A H K Y T G S T R V Q H I Q A K M T GI 1907189

41 G R A L E L L Y L P E N K P C Y L L D I 10625  
 41 E R A L E L L A L P E G K S G F L L D I GI 1065505  
 37 L R A L E L L N L Q P - - C S F I L D I GI 1907189

61 G C G T G L S G S Y L S D E G - H Y W V 10625  
 61 G C G T G M S S E V I L D A G - H M F V GI 1065505  
 55 G C G S G L S G E I L T Q E G D H V W C GI 1907189

80 G L D I S P A M L D E A V D R E I - - E 10625  
 80 G V D V S R P M L E I A R Q D E D L E S GI 1065505  
 75 G L D I S P S M L A T G L S R E L - - E GI 1907189

98 G D L L L G D M G Q G I P F K P G T F D 10625  
 100 G D F I H Q D M G L G M P F R P G S F D GI 1065505  
 93 G D L M L Q D M G T G I P F R A G S F D GI 1907189

118 G C I S I S A V Q W L C N A N K K S E N 10625  
 120 G A I S I S A I Q W L C H A N A S D E N GI 1065505  
 113 A A I S I S A I Q W L C N A D T S Y N D GI 1907189

138 P A K R L Y C F F A S L F S V L V R G S 10625  
 140 P R K R L L F F F Q S L Y G C L G R G S GI 1065505  
 133 P K Q R L M R F F N T L Y A A L K K G G GI 1907189

158 R A V L Q L Y P E N S E Q L E L I T T Q 10625  
 160 R A V F Q F Y P E N D E Q C D L I M G Q GI 1065505  
 153 K F V A Q F Y P K N D D Q V D D I L Q S GI 1907189

FIGURE 2A

178 A T K A G F S G G M V V D Y P N S A K A 10625  
 180 A H K A G F N G G L V V D F P E A A K R GI 1065505  
 173 A K V A G F S G G L V V D D P E S K K N GI 1907189

198 K K F Y L C L F S G P S T F I P E G L S 10625  
 200 K K V Y L V L M T G G V V Q L P Q A L T GI 1065505  
 193 K K Y Y L V L S S G A P P Q G E E Q V N GI 1907189

218 E N Q D E V E P R E S V F T N E R F P L 10625  
 220 E D G E E S R T Q I D N - A G R R F V W GI 1065505  
 213 L D G V T M D E E N V N L K K Q - - L R GI 1907189

238 R M S R R G M V R K - S R A W V L E K K 10625  
 239 N S R K N E K V A K G S K A W I E A K R GI 1065505  
 231 Q R L K G G K D K E S A K S F I L R K K GI 1907189

257 E R H R R Q G R E V R P D T Q Y T G R K 10625  
 259 Q R Q I K Q G R D V R H E S K Y S G R K GI 1065505  
 251 E L M K R R G R K V A K D S K F T G R K GI 1907189

277 R K P R F 10625  
 279 R K T K F GI 1065505  
 271 R R H R F GI 1907189

FIGURE 2B

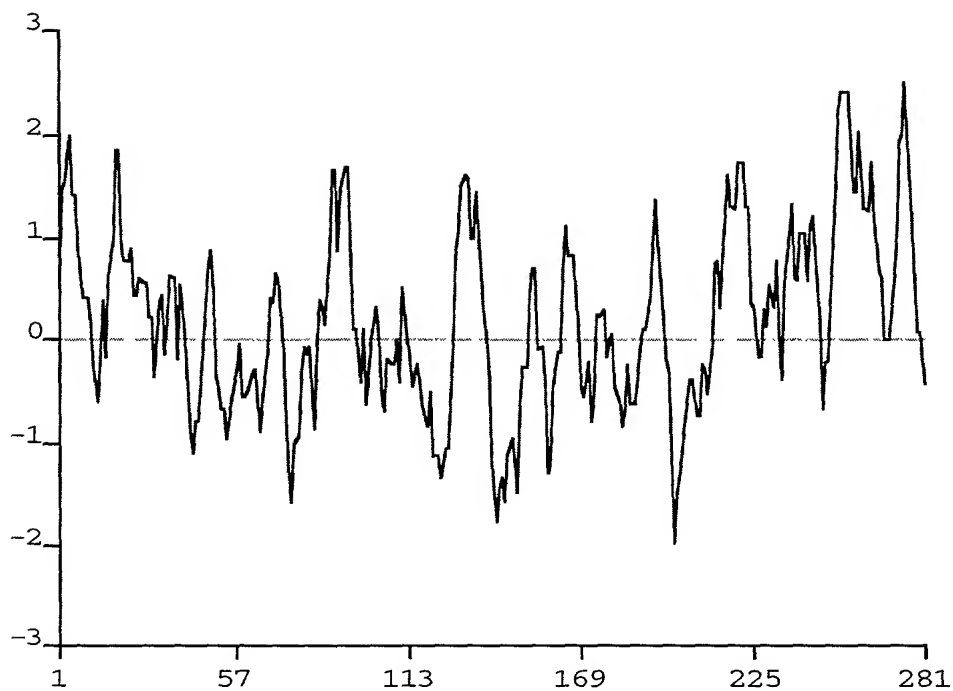


FIGURE 3A

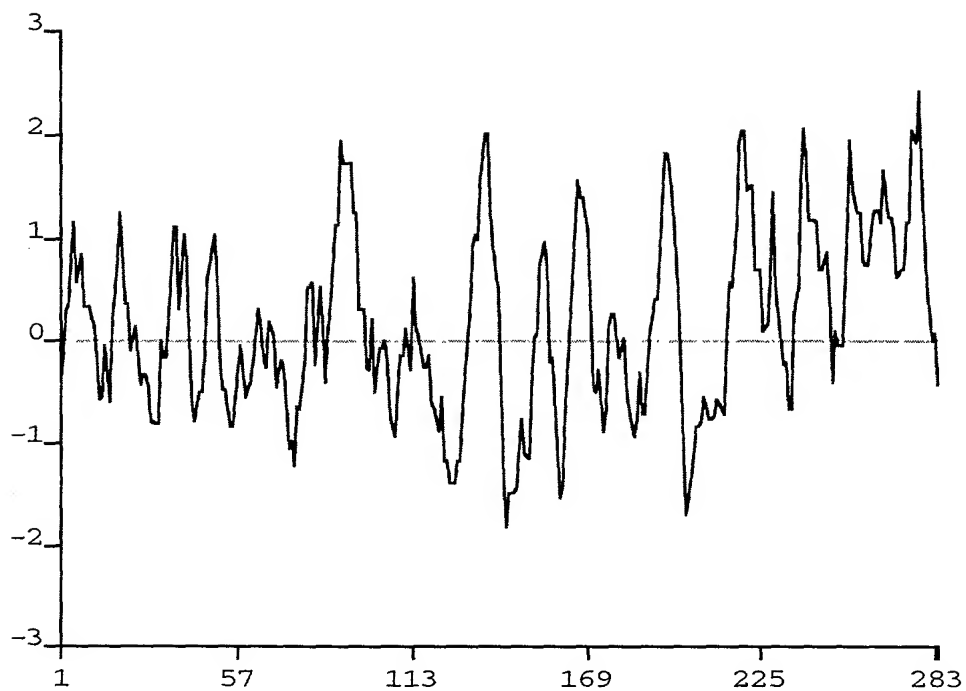


FIGURE 3B





221 D E V E P R E S V F T N E R F P L R M S 10625

241 R R G M V R K S R A W V L E K K E R H R 10625

261 R Q G R E V R P D T Q Y T G R K R K P R 10625

281 F 10625

FIGURE 4B